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Building & Highway Material Testing Laboratory

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Job No.: CTCE/BBMP/W.No.08/KRIDL/Sp_Wa/2014-15 18.07.201-

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to roads and drains at T. Ramaiah Layout in Ward No. 08, BBMP Bangalore.
Reference	AEE/KH/437/2014-15 Dated: 03.06.2014
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	18.07.2014

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2008	2009	2011	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1253	1254	1256	
4	Weight of saturated surface dry aggregate in air	W_3 g	2002	2006	2009	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	749	752	753	
6	Weight of oven dried aggregate	W_4 g	1993	1995	1996	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.661	2.653	2.651	2.655
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.693	2.692	2.697	2.694
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.45%	0.55%	0.65%	0.55%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2.0%

Note:

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Þ Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No.: CTCE/BBMP/W.No.08/KRIDL/SDBC/Stripping/2014-15 18.07.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the work	Improvements to roads and drains at T. Ramaiah Layout in Ward No. 08, BBMP, Bangalore.
Reference	AEE/KH/437/2014-15 Dated: 03.06.2014
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	18.07.2014

Type of binder : 80/100
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	2.9	3.20	96.80
2	3.2		
3	3.5		

Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/W.No.08/KRIDL/WMM/S-T/2014-15 19.06.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of Work	Improvements to roads and drains at T. Ramaiah Layout in Ward No. 08, BBMP, Bangalore.
Reference	AEE/KH/437/2014-15 Dated: 03.06.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	19.06.2014

Result : Flakiness Index = **11.78%**

Elongation Index = **13.64%**

Result : Combined Flakiness & Elongation index 25.42%

Comments:

→ Maximum allowable Flakinee & Elongation Index for Wet Mix Macadam is 30%

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Job No.: CTCE/BBMP/W.No.08/KRIDL/WMM/AIV/2014-15 19.06.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to roads and drains at T. Ramaiah Layout in Ward No. 08, BBMP, Bangalore.
Reference	AEE/KH/437/2014-15 Dated: 03.06.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	19.06.2014

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	380	384	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	80	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines	21.05	21.88	
	100* (W_2/W_1)%			21.46

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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